Datasheet: MCA2386A488

BATCH NUMBER 1608

Description:	RAT ANTI MOUSE CD223:Alexa Fluor® 488
Specificity:	CD223
Other names:	LAG-3
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	C9B7W
Isotype:	IgG1
Quantity:	100 TESTS/1ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Mouse

Product Form

Purified IgG conjugated to Alexa Fluor® 488 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®488	495	519

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein

IgG concentration 0.05 mg/ml

Concentrations	
Immunogen	Murine CD223 Ig fusion protein.
External Database Links	**UniProt:** Q61790 Related reagents **Entrez Gene:** 16768 Lag3 Related reagents
RRID	AB_566649
Fusion Partners	Cells from immunised Lewis rats were fused with cells of the Sp/20 myeloma cell line.
Specificity	**Rat anti Mouse CD223 antibody, clone C9B7W** recognizes murine lymphocyte activation gene-3 (LAG-3), a ~70 kDa activation-induced cell surface molecule that is also referred to as CD223. Murine CD223 is expressed on activated CD4 positive and CD8 positive alpha/beta T lymphocytes and a subset of natural killer (NK) cells. CD223 binds to MHC class II molecules with high affinity and is reported to negatively regulate T cell homeostasis and T cell expansion. Clone C9B7W recognizes an epitope within the D2 domain of CD223. Rat anti Mouse CD223 antibody, clone C9B7W is reported to block the *in vitro* function of murine LAG-3 but does not block binding of LAG-3 to MHC class II (Workman *et al.* 2002).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).
References	1. Workman, C.J. *et al.* (2002) Cutting edge: molecular analysis of the negative regulatory function of lymphocyte activation gene-3. J Immunol. 169 (10): 5392-5. 2. Workman, C.J. & Vignali, D.A. (2005) Negative regulation of T cell homeostasis by lymphocyte activation gene-3 (CD223). J Immunol. 174 (2): 688-95. 3. Byrne, K.T. *et al.* (2011) Autoimmune melanocyte destruction is required for robust CD8+ memory T cell responses to mouse melanoma. J Clin Invest. 121 (5): 1797-809. 4. Ordway, D. *et al.* (2007) The hypervirulent *Mycobacterium tuberculosis* strain HN878 induces a potent TH1 response followed by rapid down-regulation. J Immunol. 179: 522-31. 5. Hu, Z. *et al.* (2013) Regulatory CD8+ T cells associated with erosion of immune surveillance in persistent virus infection suppress *in vitro* and have a reversible proliferative defect. J Immunol. 191 (1): 312-22. 6. Iwasaki, Y. *et al.* (2013) Egr-2 transcription factor is required for Blimp-1-mediated IL-10 production in IL-27-stimulated CD4+ T cells. Eur J Immunol. 43: 1063-73. 7. Woo, S.R. *et al.* (2010) Differential subcellular localization of the regulatory T-cell

	protein LAG-3 and the coreceptor CD4. Eur J Immunol. 40: 1768-77.
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2386A488 10041
Regulatory	For research purposes only

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